

Model Number Description

Digits 1, 2 - Unit model

RT = Rotary chiller

Digit 3 - Unit type

A = Air-cooled

Digit 4 - Development sequence

C = Development sequence

Digit 5, 6 & 7 - Nominal capacity

140 = 140 Nominal tons

155 = 155 Nominal tons

170 = 170 Nominal tons

185 = 185 Nominal tons

200 = 200 Nominal tons

225 = 225 Nominal tons

250 = 250 Nominal tons

275 = 275 Nominal tons

300 = 300 Nominal tons

350 = 350 Nominal tons

400 = 400 Nominal tons

450 = 450 Nominal tons

500 = 500 Nominal tons

Digit 8 - Unit voltage

A = 200/60/3

C = 230/60/3

J = 380/60/3

4 = 460/60/3

5 = 575/60/3

Digit 9 - Manufacturing location

U = Water Chiller Business Unit, Pueblo, CO USA

Digit 10, 11 - Design sequence

XX = Factory Input

Digit 12 - Unit basic configuration

N = Standard efficiency/performance configuration

H = High efficiency/performance configuration

A = Extra efficiency/performance configuration

Digit 13 - Agency listing

N = No agency listing

U = UL/CUL listing

Digit 14 - Pressure vessel code

A = ASME pressure vessel code

C = Canadian code

D = Australian code

L = Chinese code

Digit 15 - Evaporator application

F = Standard (40-60 F) leaving temp

G = Low (Less than 40 F) leaving temp

R = Remote (40-60 F) leaving temp

Digit 16 - Evaporator configuration

N = 2 pass arrangement, 0.75" insulation

P = 3 pass arrangement, 0.75" insulation

Q = 2 pass arrangement, 1.25" insulation

R = 3 pass arrangement, 1.25" insulation

Digit 17 - Condenser application

N = Standard ambient range (25-115 F)

H = High ambient capability (25-125 F)

L = Low ambient capability (0-115 F)

W = Wide ambient capability (0-125 F)

Digit 18 - Condenser fin material

1 = Standard aluminum slit fins

2 = Copper fins

4 = CompleteCoat epoxy coated fins

Digit 19 - Condenser fan/motor configuration

T = STD fans with TEAO motors

W = Low noise fans

Digit 20 - Compressor motor starter type

X = Across-the-line starter

Y = Wye-delta closed transition starter

Digit 21 - Incoming power line connection

1 = Single point power connection

2 = Dual point power connection

Digit 22 - Power line connection type

T = Terminal block connection for incoming line(s)

D = Non-fused disconnect switch(es) for incoming line(s)

C = Circuit breaker(s) for incoming line(s)

Digit 23 - Unit operator interface

D = DynaView operator interface

Digit 24 - Remote operator interface

N = No remote interface

C = Tracer Comm 3 interface

B = BACnet interface

L = LonTalk compatible (LCl-C) interface

Digit 25 - Control input accessories/options

N = No remote inputs

R = Ext. evaporator leaving water setpoint

C = Ext. current limit setpoint

B = Ext. leaving water and current limit setpoint

Digit 26 - Control output accessories/options

N = No output options

A = Alarm relay outputs

C = Ice making I/O

D = Alarm relay outputs and ice making I/O

Digit 27 - Electrical protection options

0 = No short circuit rating

5 = Default short circuit rating

6 = High amp short circuit rating

Digit 28 - Flow Switch

T = Factory installed flow switch - water

U = Factory installed flow switch - glycol

Digit 29 - Control panel accessories

N = No convenience outlet

A = 15A 115V convenience outlet (60Hz)

Digit 30 - Service valves

1 = With suction service valves

Digit 31 - Compressor sound attenuation option

0 = No compressor sound attenuation

1 = Factory installed compressor sound attenuation

Digit 32 - Appearance options

N = No appearance options

A = Architectural louvered panels

C = Half louvers

Digit 33 - Installation accessories

N = No installation accessories

R = Neoprene in shear unit isolators

F = Flange kit for water connections

G = Neoprene isolators and flange kit

Digit 34 - Factory testing options

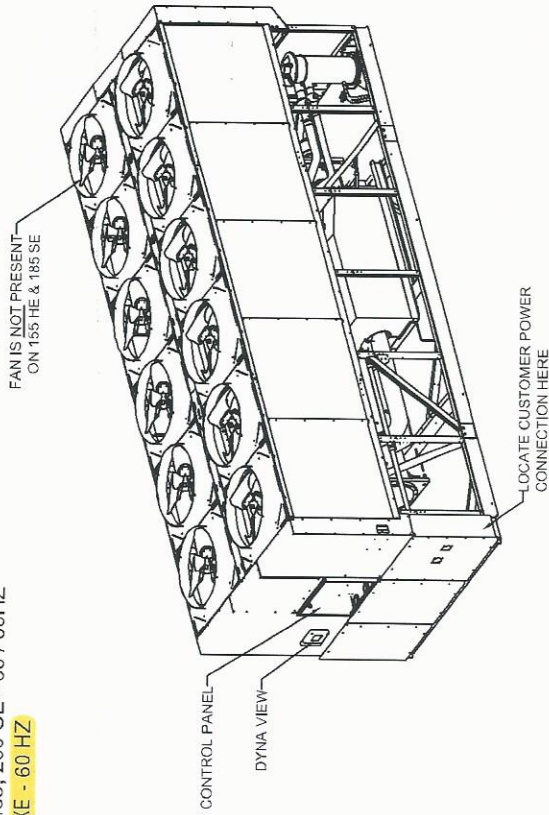
0 = Standard functional test

C = Customer-witnessed performance test with report

E = Non-witnessed performance test with report

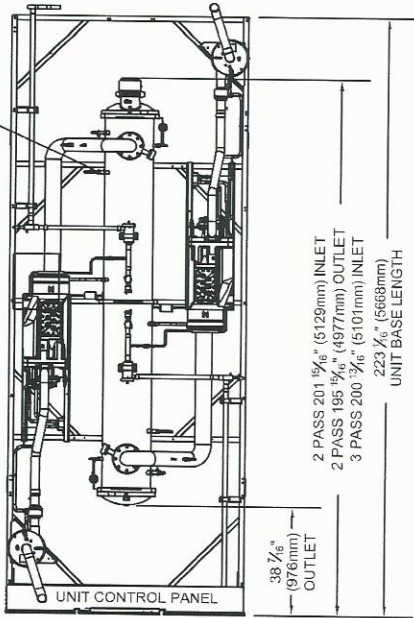
Dimensions

155, 170 HE/185, 200 SE - 50 / 60HZ
140 XE - 60 HZ



WATER CONNECTION DIAMETER:
2 PASS 6" (150mm) NPS
3 PASS 4" (100mm) NPS

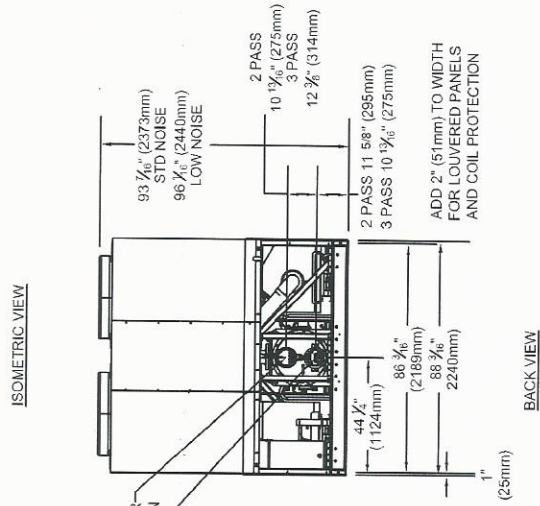
RELIEF VALVE
3/8" (19mm) NPT
2 PLACES



2 PASS 20 1 1/8" (512mm) INLET
2 PASS 19 5/8" (497mm) OUTLET
3 PASS 20 3/8" (510mm) INLET
223 1/8" (568mm)
UNIT BASE LENGTH

38 1/8" (976mm)
OUTLET

TOP PLAN VIEW
(WITH COIL BOX REMOVED)



93 1/8" (2373mm) STD NOISE
96 1/8" (2440mm) LOW NOISE

2 PASS 10 1/8" (275mm)
3 PASS 12 1/8" (314mm)

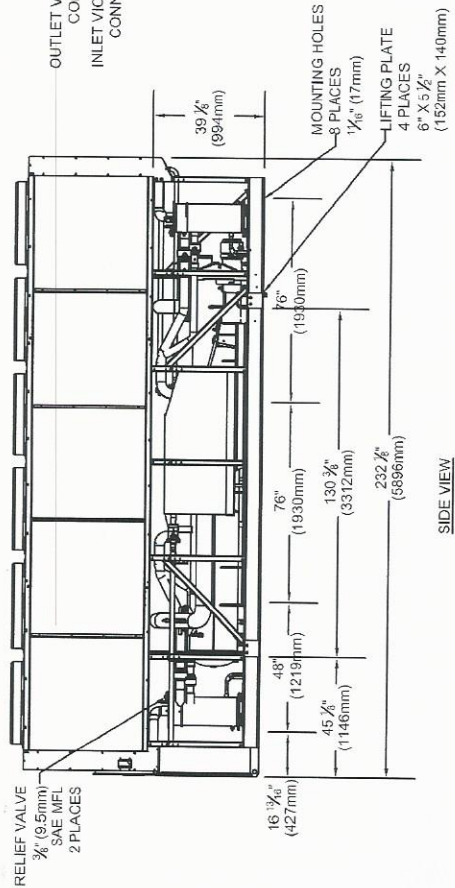
2 PASS 11 5/8" (295mm)
3 PASS 10 3/8" (275mm)

ADD 2" (51mm) TO WIDTH FOR LOUVERED PANELS AND COIL PROTECTION

44 1/8" (1124mm)
86 3/8" (2189mm)
88 3/8" (2240mm)

1" (25mm)

BACK VIEW



RELIEF VALVE
3/8" (9.5mm) SAE MFL
2 PLACES

39 1/8" (994mm)
MOUNTING HOLES
8 PLACES
1 1/8" (17mm)
LIFTING PLATE
4 PLACES
6" X 5 1/2" (152mm X 140mm)

16 3/8" (427mm)
48" (1219mm)
76" (1930mm)
130 3/8" (3312mm)
232 1/8" (5896mm)

SIDE VIEW

Weights

Weights

Table 1. Weight — packaged units — 60 Hz — aluminum or CompleteCoat coils

Unit Size (tons)	Standard Efficiency				High Efficiency				Extra Efficiency			
	Shipping		Operating		Shipping		Operating		Shipping		Operating	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
140	10831	4913	11077	5024	10858	4925	11140	5053	12172	5521	12557	5696
155	10910	4949	11113	5041	12114	5495	12414	5631	13983	6343	14306	6489
170	10868	4930	11205	5083	12172	5521	12557	5696	14434	6547	14698	6667
185	12478	5660	12892	5848	13983	6343	14306	6489	15906	7215	16382	7431
200	12885	5845	13208	5991	14434	6547	14698	6667	16006	7260	16351	7417
225	14905	6761	15224	6905	15906	7215	16382	7431	n/a			
250	14549	6599	14896	6757	16006	7260	16351	7417	19881	9018	20558	9325
275	18491	8387	19148	8685	19881	9018	20558	9325	21150	9593	21702	9844
300	20176	9152	20744	9409	21150	9593	21702	9844	23564	10688	24237	10994
350	21030	9539	21485	9745	23564	10688	24237	10994	26605	12068	27342	12402
400	24890	11290	25446	11542	26605	12068	27342	12402	n/a			
450	26310	11934	27005	12249	n/a				n/a			
500	26623	12076	27365	12413	n/a				n/a			

1. Operating weight includes refrigerant and water.
2. Shipping weight includes refrigerant.

Table 2. Weight — packaged units — 60 Hz — copper coils

Unit Size (tons)	Standard Efficiency				High Efficiency				Extra Efficiency			
	Shipping		Operating		Shipping		Operating		Shipping		Operating	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
140	13406	6081	13656	6194	13432	6093	13716	6221	15591	7072	15985	7251
155	13419	6087	13696	6212	15647	7097	15831	7181	18249	8278	18601	8437
170	13443	6098	13724	6225	15591	7072	15985	7251	18684	8475	18963	8601
185	15869	7198	16256	7374	18249	8278	18601	8437	20783	9427	21256	9642
200	16305	7396	16645	7550	18684	8475	18963	8601	20881	9471	21225	9628
225	18712	8488	19027	8631	20783	9427	21256	9642	n/a			
250	18897	8572	19160	8691	20881	9471	21225	9628	25505	11569	26072	11826
275	23370	10600	24095	10929	25505	11569	26072	11826	27078	12282	27724	12575
300	25681	11649	26212	11890	27078	12282	27724	12575	30341	13762	30968	14047
350	26894	12199	27400	12428	30341	13762	30968	14047	34482	15641	35280	16003
400	31708	14383	32315	14658	34482	15641	35280	16003	n/a			
450	32176	14595	32731	14847	n/a				n/a			
500	34502	15649	35254	15991	n/a				n/a			

1. Operating weight includes refrigerant and water.
2. Shipping weight includes refrigerant.



Table 3. 60 Hz extra efficiency – I-P

Size		140	155	170	185	200	250	275	300	350
Compressor										
						Screw				
Quantity	#	2	2	2	2	2	3	3	4	4
Nominal size @60Hz	(tons)	70/70	85/70	85/85	100/85	100/100	70-70/85	85-85/85	70-70/70-70	85-85/85-85
Evaporator										
						Flooded				
Water storage	(gal)	40	39	43	43	43	72	72	83	91
2 pass arrangement										
Min flow	(gpm)	241	217	241	241	241	375	375	404	461
Max flow	(gpm)	883	796	883	883	883	1374	1374	1483	1690
Water connection	(NPS-in)	6	6	6	6	6	8	8	8	8
3 pass arrangement										
Min flow	(gpm)	161	145	161	161	161	250	250	270	307
Max flow	(gpm)	589	531	589	589	589	916	916	989	1127
Water connection	(NPS-in)	4	4	4	4	4	6	6	8	8
Condenser										
						Fin and tube				
Qty of coils	#	4	4	4	8	8	8	8	8	8
Coil length	(in)	216/216	252/216	252/252	144/144	180/180	216/144	252/144	216/216	252/252
Coil height	(in)	42	42	42	42	42	42	42	42	42
Number of rows	#	192	192	192	192	192	192	192	192	192
Fins per foot	(fpf)	3	3	3	3	3	3	3	3	3
Fan										
						Direct drive propeller				
Quantity	#	6/6	7/6	7/7	8/6	8/8	12/6	14/6	12/12	14/14
Diameter	(in)	30	30	30	30	30	30	30	30	30
Air flow/fan	(cfm)	9199	9200	9201	9783	9203	9652	9605	9199	9201
Power/motor	(hp)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Fan speed	(rpm)	1140	1140	1140	1140	1140	1140	1140	1140	1140
Tip speed	(Ft/Min)	8954	8954	8954	8954	8954	8954	8954	8954	8954
General Unit										
						HFC-134a				
# Refrig ckts	#	2	2	2	2	2	2	2	2	2
% min load	%	15	15	15	15	15	15	15	15	15
Refrigerant charge	(lb)	215/215	225/215	225/225	235/235	235/235	415/200	460/200	415/415	460/460
Oil charge	(gal)	1.3/1.3	1.9/1.3	1.9/1.9	1.9/1.9	1.9/1.9	2.1-2.1/1.9	2.1-2.1/1.9	2.1-2.1/2.1-2.1	2.1-2.1/2.1-2.1
Min ambient-std	(°F)	25	25	25	25	25	25	25	25	25
Min ambient-low	(°F)	0	0	0	0	0	0	0	0	0

1. Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.
 2. Minimum start-up/operating ambient is based on a 5 mph wind across the condenser.